

REMARKS

DETAILED ACTION

1. The Examiner has recognized that Claims 3,13, 26, 32, and 39-42 have been canceled in the previous amendment.
2. The Examiner has recognized that Claims 43-46 have been added in the previous amendment.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The Examiner has rejected Claims 1 -2, 4-5, 9-12,14-15, 19, 29-31, 33-34, and 38 under 35 U.S.C. 102(b) as being clearly anticipated by Stark, et al. Stark, et al disclose an apparatus for propelling a stream of particulate matter comprising all of the subject matter set forth in the claims above. A compressed gas source is delivered to a mixing chamber through a gas receiving port, and mixes with abrasive within the chamber, followed by discharge through a discharge conduit to strike a target material.

- 4a. Applicant has amended independent Claims 1, 10, and 29 to include the limitation as follows:

" the mixing chamber is pre-charged with a predetermined amount of particulate matter and wherein the gas delivery conduit is not conducive to the replenishment of particulate matter, thus providing a disposable apparatus upon the exhaustion of the particulate matter disposed within the mixing chamber" to further support a disposable apparatus. Stark, et al is clearly defined as a non-disposable apparatus.

4b. The limitation of the particle-directing tube being "bendable" is a functional limitation which is deemed sufficiently broad to read on the discharge tube of Stark, et al. While not shown as having a bend, the material in Stark is certainly capable of being bent.

Applicant reiterates the limitation of the claims as follows: "elongated particle directing tube is manually bendable making the discharge from the elongated particle directing tube omni-directional at the time of use."

Applicant, in the previous reply, narrowed the respective claims of bendable to read as manually bendable. Applicant respectfully notes, Stark, et al. is not manually bendable. Stark et al. does not teach an elongated particle directing tube (emphasis on elongates) and the very short particle directing tube of Stark, et al. is not conducive to being manually bendable.

4c. The device of Stark et al is of a size and shape to allow the nozzle to be hand-held.

Stark, et al. is of a shape and size to allow the nozzle to be handheld. Stark, et al. teaches away from being hand held and actually supports the requirement for the apparatus to be held and directed or aimed at the object (Column 2, Lines 25-28). Stark et al. teaches an apparatus for preparing dental castings outside of a patient's mouth. Stark, et al. would have to consider sterilization in the apparatus design in order to accommodate utilization inside a patient's mouth.

Applicant teaches an apparatus that is specifically designed to be handheld and used within a patient's mouth. Applicant believes the application of said apparatus within a patient's mouth teaches away from Stark et al. Further, Applicant teaches an apparatus that is disposable, such to ensure sterilization.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The Examiner has rejected Claims 6-8, 16-18, and 35-37 under 35 U.S.C. 103(a) as being unpatentable over Stark, et al in view of Dougherty. Dougherty discloses the known use of color-coding of containers to identify the contents therein, and further disclose the known use of an end cap (70) for sealing the discharge end of a chamber to prevent the contents from being discharged. The use of color-coding to help identify the contents of the chamber would have been obvious in view of Dougherty. Such color-coding is used throughout industry for discriminating between similar looking containers, and for identifying their contents. To further provide an end cap at the distal end of the discharge conduit to prevent inadvertent discharge of the media from the chamber when not in use, would have been obvious in view of Dougherty.

Claims 6-8, 16-18, and 35-37 depend from Independent 1, 10, and 29 respectively. Claims Applicant claims a pre-filled apparatus with color-coding to identify the particulate matter disposed within said apparatus. One would require that Stark, et al. teaches an apparatus that is pre-filled with particulate matter in order to apply color-coding of Dougherty to Stark, et al. Dougherty emphasis's the argument that the color coding is referenced to a pre-filled apparatus. Stark, et al. does not teach or imply a prefilled apparatus with options for different particulate materials.

Applicant reiterates the argument that one would only properly color-code an object when the object is pre-filled with particulate matter. Stark discloses a refillable apparatus, therefore, there is no motivation to combine Stark and Dougherty as a

reference against the subject claims of this section of the reply. Since Stark, et al. fails to teach any specific matter that would be subjective to color-coding, there is no motivation to combine Stark and Dougherty as a reference against the subject claims of this section of the reply. Stark, et al. does not teach different particulate materials, more specifically, Stark, et al. only teaches Aluminum Oxide as the particulate matter.

Applicant claims color-coding respective to the particulate matter. Applicant therefore believes the rejection is overcome as the lack of motivation to combine Stark, et al. and Dougherty. Applicant believes the rejection of Claims 6-8, 16-18, and 35-37 under 35 U.S.C. 103(a) as being unpatentable over Stark, et al in view of Dougherty have been overcome by remarks herein. Applicant respectfully requests the Examiner reconsider and withdraw the rejection of Claims 6-8, 16-18, and 35-37 under 35 U.S.C. 103(a) as being unpatentable over Stark, et al in view of Dougherty.

7. The Examiner has rejected Claims 20-21, 27-28, 43, and 46 under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Schur et al. In-as-much as Applicant is only entitled to the filing date of the CIP application for the new subject matter directed to the self-sealing mechanism recited in claim 20, the Schur et al reference is deemed to constitute prior art against this set of claims. Schur et al disclose a self-sealing one-way valve located within the chamber upstream of the gas receiving port. To provide such a one-way valve in the chamber of Stark, et al.

upstream of the gas receiving port, to prevent backflow of media would have been obvious in view of Schur, et al.

Applicant claims a specific one-way valve in the chamber of Stark, et al. that is clearly an improvement over Schur, et al. Schur, et al. teaches a removable valve comprising a complex design. It would not be conducive for one to combine Stark, et al. and Schur, et al. to provide "a non-removable, self sealing mechanism contiguous to the sidewall of the chamber." Schur, et al. teaches a removable, expensive self-sealing valve. A non-removable, self-sealing mechanism would be directed towards a disposable apparatus. The self-sealing valve of Schur, et al. would not be supportive of a non-removable, self-sealing mechanism contiguous to the sidewall of the chamber, wherein the apparatus is designed to be disposed of.

Applicant believes that a non-removable, self-sealing mechanism is a distinct differentiation from Schur, et al. A non-removable, self-sealing mechanism directs the apparatus towards a pre-filled and disposable apparatus. Schur, et al. teaches a removable valve (Col. 5, Lines 50-55). This requires the user to install said valve in each potential location for use. The inclusion of a valve within said apparatus affords the user portability.

Applicant believes Claims 20-21, 27-28, 43, and 46 define a unique apparatus and an improvement over Schur, et al.

Applicant believes the rejection of Claims 20-21, 27-28, 43, and 46 under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Schur et al. have been overcome by remarks herein. Applicant earnestly requests the Examiner reconsider and withdraw the rejections of Claims 20-21, 27-28, 43, and 46 under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Schur et al.

8. The Examiner has rejected Claims 22-25, and 44 under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Schur et al and further in view of Daubenberger, et al. Schur, et al. teaches to provide a check-valve in a location between the gas receiving port and the mixing chamber to prevent backflow of the abrasive media. Daubenberger, et al. disclose a check-valve for one-way flow of media through a passageway comprising a hemispherical-shaped flexible material having a slit which closes to prevent backflow of media through the valve. To provide such a conventional hemispherical-shaped check-valve in the location taught by Schur, et al. to prevent backflow of media while minimizing the number of moving parts prone to wear, would have been obvious in view of Daubenberger, et al.

Applicant believes that the application of a hemispherically shaped check valve is a significant improvement over the teachings of Schur, et al. Since Daubenberger, et al. was available at the time of the disclosure of Schur, et al. and being a significant improvement by minimizing the number of moving parts prone to wear, Applicant

believes the claim should be supported as a Jepson Claim. Applicant respectfully notes, the Examiner's comments within the Office Action supporting this argument.

9. Claim 45 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant respectfully thanks the Examiner for the recognition of allowance of Claim 45 if rewritten in independent form including the limitations of all intervening claims. At this time, Applicant respectfully believes the intervening claims are distinct from the cited art and should stand alone.

Should the Examiner find the intervening claims are not distinct and patentable from the cited art, Applicant respectfully requests the Examiner contact the Applicant for an Examiner's amendment.

The following would be the proposed Examiner's amendment to Independent Claim 20 and subsequent claims:

20. (Proposed Examiner's Amendment) Handheld apparatus for propelling particulate matter, the apparatus comprising:

a mixing chamber having a sidewall, a gas receiving port at a first end of the chamber and a discharge end wall at an opposite end of the chamber and designed to be handheld;

a discharge port in the discharge end wall;

a discharge conduit disposed within the chamber and extending in fluid communication from the discharge port towards the gas receiving port;

an elongated particle-directing tube disposed external to the chamber, a proximal end of the particle-directing tube in fluid communication with the discharge port; and

a non-removable, self sealing mechanism contiguous to the sidewall of the chamber, wherein the self sealing mechanism opens to allow a gas stream to flow into the handheld mixing chamber when exposed to a gas stream, and the self sealing mechanism seals when not exposed to the gas stream, whereby the self sealing mechanism is located between the gas receiving port and the mixing chamber,

wherein said self sealing mechanism is of a flexible material, a hemispherical shape and at least two slits.

Claims 22-24, 44, 45 and 46 would be cancelled.

Applicant would make the amendment with traverse and would file a divisional to continue prosecution of the non-removable, self sealing member.

10. Applicant's arguments filed January 16, 2004 (Amendment D filed on July 10th, 2004) have been fully considered but they are not persuasive. With regard to applicant's new limitation wherein "the mixing chamber is pre-charged with a particulate matter..." is deemed to be readable on Stark et al. Note that in Stark et al the mixing chamber holds a quantity of particulate matter, and is considered pre-charged if the air pressure is turned off during use, as at least some of the particulate could remain in the chamber. Never-the-less, Claims 1, 10, and 29 would be allowable over Stark et al if a recitation of the mixing chamber being pre-charged with "a fixed amount of particulate

matter" and the gas delivery conduit "contributing no additional particulate matter to that contained in the mixing chamber" is incorporated into the claims. With regard to independent claim 20 Schur disclose the location and structure of a check valve claimed in claim 20. The Schur patent predates the filing date of Applicant's CIP subject matter by more than one year, thus applicant's affidavit is not deemed sufficient to overcome the art of record.

Applicant earnestly thanks the Examiner for notation of the requested claim language to support the arguments presented in the correspondence dated July 10, 2004. Applicant has amended Claims 1, 10, and 29 including the limitations as recommended by the Examiner.

11. In view of the lack of treatment of claims 39-42 in the last Office action, this action is not being made final.

Applicant respectfully thanks the Examiner for recognizing the lack of treatment of Claims 39-42 and making the subject Office Action non-final.

CONCLUSIONS

Applicants believe the amendments and remarks submitted herein, herein provide a complete response to the Office Action mailed on October 28th, 2004. Claims

1, 2, 4-12, 14-15, 27-31, 32-38, and 43-46 remain in the application. Applicant believes the remaining claims are in condition for allowance. Applicant earnestly requests the Examiner reconsider the rejections of claims 1, 2, 4-12, 14-15, 27-31, and 32-38.

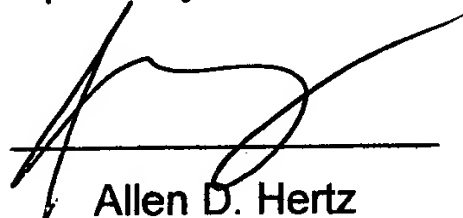
The Examiner has established a shortened statutory period of three (3) months for response to the Office Action. Applicant has responded to the Office Action on or before February 28th, 2005 with a proper certificate of correspondence. Therefore, the Applicant believes the response requires a request for a one-month extension and believes that a fee of \$60 is required and submitted such herein. Applicant believes the response provided is complete. Applicant believes the amendments have not introduced any new matter.

The present application, after entry of this amendment, comprises thirty-eight (38) claims, including four (4) independent claims. Applicant has already submitted sufficient fees with the Original application for thirty-eight (38) claims, including four (4) independent claims. Applicant, therefore, believes that no additional fee respective to claims is currently due.

If the Examiner believes that there are any informalities that can be corrected by Examiner's amendment, a telephone call to the Agent of Record (Allen Hertz) at (561)

883-0115 (Office)(Please leave a message) or (561) 716-3915 (Cell phone) is respectfully solicited.

Respectfully submitted,



Allen D. Hertz

Agent of Record, Reg. No.: 50,942

Please submit all correspondence concerning this patent application to:

Allen D. Hertz

Registration Number: 50,942



31877

PATENT & TRADEMARK OFFICE

Customer Number: 31877
12784 Tulipwood Circle
Boca Raton, Florida 33428
Tel / Fax: 561/883-0115
Cell: 561/716-3915